#2

OIPE

RAW SEQUENCE LISTING DATE: 10/18/2001 PATENT APPLICATION: US/09/965,640 TIME: 09:50:57

Input Set : A:\0315-C Seq Listce filed 092701.txt

Output .Set: N:\CRF3\10182001\1965640.raw

3	<110> A	DDT.TCA	NT. Si	me .T	ohn E									MITTE
	<120> T						וארד ביי	Δ Δ N1	ח פח	YPEI	וחדיים	ES		
	<130> F					1 000.	. Zi Div			J11 111	. 110.			
	<140> C					DED. 1	10 /00	/065	640					
	<141> C							, 303	, 040					
	<150> P							021						
	<150> P							<i>34</i> 1						
	<160> N					0/10	,							
	<170> N					ion 2	1							
	<170> S			EIICIII	vers.	TOII 3.	1							
	<210> 3													
	<211> E													
	<213> 0			mucai	luc									
				musc	urus									
	<220> F <221> N													
	<221> N <222> L			1160	0 \									
	<223> 0				0)									
	<400> S			IION:										
	atg atg			~~~	702 0	ta taa	. ++0	000	2+4	224	and t	tas	a.c.c	48
	acy acy Met Met	_	_		-	_		-	_	_	_		-	40
33		Val L	eu ser 5	GIY A	ита п	eu Cys	10	AIG	Met	пуз	ASP	15	міа	
	ı ttg aag	ata a	•	ata /	220 2	at aac		ata	o t a	act	~~~		ata	96
	Leu Lys													30
37	ned hys	20	_	neu i	nis A	25	GIII	neu	Deu	ALG	30	GIY	пеа	
	cac gca			att s	222 (7)			ato	agt	att		cca	aat	144
	His Ala													744
41	nis nia	35	ys var	116 1	uys G. 40		GIU	116	Der	45	vai	110	A511	
	cgg gca		at dcc	agt o	_	-	atc	atc	cta		att	саа	aaa	192
	Arg Ala		-	-	-		_		_		_			172
45	50	DCG A.	op ma		55	CI 110	, , , ,	110	60	0.1.7	, u i	01.1	OI,	
	gga agc	can to	ac cta	-	_	ar ara	αaα	aaa		cca	att	cta	aaa	240
	gga agc Gly Ser													240
49	_	OIN C	ys neu	70	J D 0.	- y - 1111	014	75	011	110	110	DCu	80	
	ctt gag	cca g	to aac		ata a	ag ctc	tac	. –	aaa.	acc	aaα	αаа		288
	Leu Glu													200
53	Dea Ola	110 11	85	110 1		Iu Dec	90	Dea		u	210	95	001	
	aag agc	ttc ac		tac c	raa co	aa aat		aat	ctt	acc	tcc		ttc	336
	Lys Ser						_							7.7
57	270 001		00	-1		105		0.21	200		110	001	- 110	
	gaa tcc			cca c	ac to			tac	acc	tica		αаа	act.	384
	Glư Ser													501
61		115	1-		_	20		0,70		125				
	gac cag		te ago	ctc a			act	σασ	σac		αcc	taa	gat	432
	Asp Gln													
65	130				L35				140			F		
	gct ccc		ca dac	-		tt cad	саσ	tat						468
	Ala Pro													
00 /			p	1	. 1 - 11			013	5					





DATE: 10/18/2001 RAW SEQUENCE LISTING TIME: 09:50:57 PATENT APPLICATION: US/09/965,640

Input Set : A:\0315-C Seq Listce filed 092701.txt
Output Set: N:\CRF3\10182001\I965640.raw

69 145 150 155	
72 <210> SEQ ID NO: 2	
73 <211> LENGTH: 156	
74 <212> TYPE: PRT	
75 <213> ORGANISM: Mus musculus	
77 <400> SEQUENCE: 2	
79 Met Met Val Leu Ser Gly Ala Leu Cys Phe Arg Met Lys Asp Ser Ala	
80 1 5 10 15 15 15 16 17 16 18 18 18 18 18 18 18 18 18 18 18 18 18	
83 Leu Lys Val Leu Tyr Leu His Asn Asn Gln Leu Leu Ala Gly Gly Leu	
04 20	
87 His Ala Glu Lys Val Ile Lys Gly Glu Glu Ile Ser Val Val Pro Asn	
91 Arg Ala Leu Asp Ala Ser Leu Ser Pro Val Ile Leu Gly Val Gln Gly	
92 50 55 60	
95 Gly Ser Gln Cys Leu Ser Cys Gly Thr Glu Lys Gly Pro Ile Leu Lys	
90 05	
99 Leu Glu Pro Val Asn Ile Met Glu Leu Tyr Leu Gly Ala Lys Glu Ser	
100	
103 Lys Ser Phe Thr Phe Tyr Arg Arg Asp Met Gly Leu Thr Ser Ser Phe	
104	
107 Glu Ser Ala Ala Tyr Pro Gly Trp Phe Leu Cys Thr Ser Pro Glu Ala	
100 113	
111 Asp Gln Pro Val Arg Leu Thr Gln Ile Pro Glu Asp Pro Ala Trp Asp	
112 150	
115 Ala Pro Ile Thr Asp Phe Tyr Phe Gln Gln Cys Asp	
110 143	
119 <210> SEQ ID NO: 3	
120 <211> LENGTH: 468	
121 <212> TYPE: DNA	
122 <213> ORGANISM: Homo sapiens	
124 <220> FEATURE:	
125 <221> NAME/KEY: CDS 126 <222> LOCATION: (1)(468)	
126 <222> LOCATION: (1):.(400) 127 <223> OTHER INFORMATION:	
130 <400> SEQUENCE: 3	
130 (400) SEQUENCE. 3 131 atg gtc ctg agt ggg gcg ctg tgc ttc cga atg aag gac tcg gca ttg	48
132 Met Val Leu Ser Gly Ala Leu Cys Phe Arg Met Lys Asp Ser Ala Leu	
132 Met val hed sel diy Ald hed eys the his hes 2/2 her 133 1 5 10	
135 aag gtg ctt tat ctg cat aat aac cag ctt cta gct gga ggg ctg cat	96
136 Lys Val Leu Tyr Leu His Asn Asn Gln Leu Leu Ala Gly Gly Leu His	•
130 Bys val Bed Tyl Bed MIS Rish Rish CIR Bed Bed Hear Car 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
139 gca ggg aag gtc att aaa ggt gaa gag atc agc gtg gtc ccc aat cgg	144
140 Ala Gly Lys Val Ile Lys Gly Glu Glu Ile Ser Val Val Pro Asn Arg	
140 Ala Gly Bys val Tie Bys Gly Gla Gla 120 501 141 45	
143 tgg ctg gat gcc agc ctg tcc ccc gtc atc ctg ggt gtc cag ggt gga	192
144 Trp Leu Asp Ala Ser Leu Ser Pro Val Ile Leu Gly Val Gln Gly	
144 TIP Lett Asp Ald Sel Lett Sel Tio Val Tio 200 60	
147 agc cag tgc ctg tca tgt ggg gtg ggg cag gag ccg act cta aca cta	240
148 Ser Gln Cys Leu Ser Cys Gly Val Gly Gln Glu Pro Thr Leu Thr Leu	
1.0 551 511 615 261 511 511 111 111 111 111	



DATE: 10/18/2001 TIME: 09:50:57

PATENT APPLICATION: US/09/965,640

Input Set : A:\0315-C Seq Listce filed 092701.txt

Output Set: N:\CRF3\10182001\1965640.raw

149	65					70					75					80		
	gag	cca	qtq	aac	atc	atg	gag	ctc	tat	ctt	ggt	gcc	aag	gaa	tcc	aag		288
	Ğlu																	
153	-				85				-	90	_				95			
	agc	ttc	acc	ttc	tac	cqq	cqq	gac	atg	ggg	ctc	acc	tcc	agc	ttc	gag		336
	Ser																•	
157				100	•	_		•	105	_				110				
	tcg	act	acc	tac	ccq	qqc	taa	ttc	ctq	tgc	acq	gtg	cct	gaa	gcc	gat		384
	Ser																	
161			115	-		-	-	120		-			125					
	cag	cct	atc	aqa	ctc	acc	cag	ctt	ccc	gag	aat	ggt	ggc	tgg	aat	gcc		432
	Gln																	
165		130		_			135					140^{-}	_					
	ccc		aca	qac	ttc	tac	ttc	caq	cag	tgt	gac	tag						468
	Pro											_						
	145					150				•	155							
	<210)> SI	EO II	ON C	: 4													
	<21																	
	<21																	
175	<21	3> 01	RGAN	ISM:	Homo	san	oiens	3										
	•					•	•											
177	<400)> SI	EQUEI	NCE:	4													
			EQUEI Leu			Ala	Leu	Cys	Phe	Arg	Met	Lys	Asp	Ser	Ala	Leu		
	Met					Ala	Leu	Cys	Phe	Arg 10	Met	Lys	Asp	Ser	Ala 15	Leu		
179 180	Met 1	Val	Leu	Ser	Gly 5					10					15			
179 180	Met	Val	Leu	Ser	Gly 5					10					15			
179 180 183 184	Met 1 Lys	Val Val	Leu Leu	Ser Tyr 20	Gly 5 Leu	His	Asn	Asn	Gln 25	10 Leu	Leu	Ala	Gly	Gly 30	15 Leu	His		
179 180 183 184	Met 1	Val Val	Leu Leu	Ser Tyr 20	Gly 5 Leu	His	Asn	Asn	Gln 25	10 Leu	Leu	Ala	Gly	Gly 30	15 Leu	His		
179 180 183 184 187	Met 1 Lys Ala	Val Val Gly	Leu Leu Lys 35	Ser Tyr 20 Val	Gly 5 Leu Ile	His Lys	Asn Gly	Asn Glu 40	Gln 25 Glu	10 Leu Ile	Leu Ser	Ala Val	Gly Val 45	Gly 30 Pro	15 Leu Asn	His Arg		
179 180 183 184 187	Met 1 Lys	Val Val Gly	Leu Leu Lys 35	Ser Tyr 20 Val	Gly 5 Leu Ile	His Lys	Asn Gly	Asn Glu 40	Gln 25 Glu	10 Leu Ile	Leu Ser	Ala Val	Gly Val 45	Gly 30 Pro	15 Leu Asn	His Arg		
179 180 183 184 187 188 191	Met 1 Lys Ala	Val Val Gly Leu 50	Leu Lys 35 Asp	Ser Tyr 20 Val Ala	Gly 5 Leu Ile Ser	His Lys Leu	Asn Gly Ser 55	Asn Glu 40 Pro	Gln 25 Glu Val	10 Leu Ile Ile	Leu Ser Leu	Ala Val Gly 60	Gly Val 45 Val	Gly 30 Pro Gln	15 Leu Asn Gly	His Arg Gly		
179 180 183 184 187 188 191	Met 1 Lys Ala Trp Ser	Val Val Gly Leu 50	Leu Lys 35 Asp	Ser Tyr 20 Val Ala	Gly 5 Leu Ile Ser	His Lys Leu	Asn Gly Ser 55	Asn Glu 40 Pro	Gln 25 Glu Val	10 Leu Ile Ile	Leu Ser Leu	Ala Val Gly 60	Gly Val 45 Val	Gly 30 Pro Gln	15 Leu Asn Gly	His Arg Gly		
179 180 183 184 187 188 191 192 195 196	Met 1 Lys Ala Trp Ser 65	Val Val Gly Leu 50 Gln	Leu Lys 35 Asp Cys	Ser Tyr 20 Val Ala Leu	Gly 5 Leu Ile Ser	His Lys Leu Cys 70	Asn Gly Ser 55 Gly	Asn Glu 40 Pro Val	Gln 25 Glu Val	10 Leu Ile Ile Gln	Leu Ser Leu Glu 75	Ala Val Gly 60 Pro	Gly Val 45 Val	Gly 30 Pro Gln Leu	15 Leu Asn Gly Thr	His Arg Gly Leu 80		
179 180 183 184 187 188 191 192 195 196	Met 1 Lys Ala Trp Ser	Val Val Gly Leu 50 Gln	Leu Lys 35 Asp Cys	Ser Tyr 20 Val Ala Leu	Gly 5 Leu Ile Ser	His Lys Leu Cys 70	Asn Gly Ser 55 Gly	Asn Glu 40 Pro Val	Gln 25 Glu Val	10 Leu Ile Ile Gln	Leu Ser Leu Glu 75	Ala Val Gly 60 Pro	Gly Val 45 Val	Gly 30 Pro Gln Leu	15 Leu Asn Gly Thr	His Arg Gly Leu 80		
179 180 183 184 187 188 191 192 195 196 199 200	Met 1 Lys Ala Trp Ser 65 Glu	Val Val Gly Leu 50 Gln Pro	Leu Lys 35 Asp Cys Val	Ser Tyr 20 Val Ala Leu Asn	Gly 5 Leu Ile Ser Ser Ile 85	His Lys Leu Cys 70 Met	Asn Gly Ser 55 Gly	Asn Glu 40 Pro Val Leu	Gln 25 Glu Val Gly	10 Leu Ile Ile Gln Leu 90	Leu Ser Leu Glu 75 Gly	Ala Val Gly 60 Pro Ala	Gly Val 45 Val Thr	Gly 30 Pro Gln Leu Glu	15 Leu Asn Gly Thr Ser 95	His Arg Gly Leu 80 Lys		
179 180 183 184 187 188 191 192 195 196 199 200	Met 1 Lys Ala Trp Ser 65	Val Val Gly Leu 50 Gln Pro	Leu Lys 35 Asp Cys Val	Ser Tyr 20 Val Ala Leu Asn	Gly 5 Leu Ile Ser Ser Ile 85	His Lys Leu Cys 70 Met	Asn Gly Ser 55 Gly	Asn Glu 40 Pro Val Leu	Gln 25 Glu Val Gly	10 Leu Ile Ile Gln Leu 90	Leu Ser Leu Glu 75 Gly	Ala Val Gly 60 Pro Ala	Gly Val 45 Val Thr	Gly 30 Pro Gln Leu Glu	15 Leu Asn Gly Thr Ser 95	His Arg Gly Leu 80 Lys		
179 180 183 184 187 188 191 192 195 196 199 200 203 204	Met 1 Lys Ala Trp Ser 65 Glu	Val Val Gly Leu 50 Gln Pro	Leu Lys 35 Asp Cys Val	Tyr 20 Val Ala Leu Asn Phe 100	Gly 5 Leu Ile Ser Ser Ile 85 Tyr	His Lys Leu Cys 70 Met	Asn Gly Ser 55 Gly Glu Arg	Asn Glu 40 Pro Val Leu Asp	Gln 25 Glu Val Gly Tyr Met 105	10 Leu Ile Ile Gln Leu 90 Gly	Leu Ser Leu Glu 75 Gly Leu	Ala Val Gly 60 Pro Ala Thr	Gly Val 45 Val Thr Lys Ser	Gly 30 Pro Gln Leu Glu Ser 110	15 Leu Asn Gly Thr Ser 95 Phe	His Arg Gly Leu 80 Lys		
179 180 183 184 187 188 191 192 195 196 199 200 203 204 207 208	Met 1 Lys Ala Trp Ser 65 Glu Ser	Val Gly Leu 50 Gln Pro Phe Ala	Leu Lys 35 Asp Cys Val Thr Ala 115	Tyr 20 Val Ala Leu Asn Phe 100 Tyr	Gly 5 Leu Ile Ser Ser Ile 85 Tyr Pro	His Lys Leu Cys 70 Met Arg	Asn Gly Ser 55 Gly Glu Arg Trp	Asn Glu 40 Pro Val Leu Asp Phe 120	Gln 25 Glu Val Gly Tyr Met 105 Leu	10 Leu Ile Ile Gln Leu 90 Gly Cys	Leu Ser Leu Glu 75 Gly Leu Thr	Ala Val Gly 60 Pro Ala Thr	Gly Val 45 Val Thr Lys Ser Pro 125	Gly 30 Pro Gln Leu Glu Ser 110 Glu	15 Leu Asn Gly Thr Ser 95 Phe	His Arg Gly Leu 80 Lys Glu Asp		
179 180 183 184 187 188 191 192 195 196 199 200 203 204 207 208	Met 1 Lys Ala Trp Ser 65 Glu Ser	Val Gly Leu 50 Gln Pro Phe Ala	Leu Lys 35 Asp Cys Val Thr Ala 115	Tyr 20 Val Ala Leu Asn Phe 100 Tyr	Gly 5 Leu Ile Ser Ser Ile 85 Tyr Pro	His Lys Leu Cys 70 Met Arg	Asn Gly Ser 55 Gly Glu Arg Trp	Asn Glu 40 Pro Val Leu Asp Phe 120	Gln 25 Glu Val Gly Tyr Met 105 Leu	10 Leu Ile Ile Gln Leu 90 Gly Cys	Leu Ser Leu Glu 75 Gly Leu Thr	Ala Val Gly 60 Pro Ala Thr	Gly Val 45 Val Thr Lys Ser Pro 125	Gly 30 Pro Gln Leu Glu Ser 110 Glu	15 Leu Asn Gly Thr Ser 95 Phe	His Arg Gly Leu 80 Lys Glu Asp		
179 180 183 184 187 188 191 192 195 196 199 200 203 204 207 208	Met 1 Lys Ala Trp Ser 65 Glu Ser	Val Gly Leu 50 Gln Pro Phe Ala	Leu Lys 35 Asp Cys Val Thr Ala 115	Tyr 20 Val Ala Leu Asn Phe 100 Tyr	Gly 5 Leu Ile Ser Ser Ile 85 Tyr Pro	His Lys Leu Cys 70 Met Arg	Asn Gly Ser 55 Gly Glu Arg Trp	Asn Glu 40 Pro Val Leu Asp Phe 120	Gln 25 Glu Val Gly Tyr Met 105 Leu	10 Leu Ile Ile Gln Leu 90 Gly Cys	Leu Ser Leu Glu 75 Gly Leu Thr	Ala Val Gly 60 Pro Ala Thr	Gly Val 45 Val Thr Lys Ser Pro 125	Gly 30 Pro Gln Leu Glu Ser 110 Glu	15 Leu Asn Gly Thr Ser 95 Phe	His Arg Gly Leu 80 Lys Glu Asp		
179 180 183 184 187 188 191 192 195 196 199 200 203 204 207 208 211 212	Met 1 Lys Ala Trp Ser 65 Glu Ser	Val Gly Leu 50 Gln Pro Phe Ala Pro 130	Leu Lys 35 Asp Cys Val Thr Ala 115 Val	Tyr 20 Val Ala Leu Asn Phe 100 Tyr	Gly 5 Leu Ile Ser Ser Ile 85 Tyr Pro Leu	His Lys Leu Cys 70 Met Arg Gly Thr	Asn Gly Ser 55 Gly Glu Arg Trp Gln 135	Asn Glu 40 Pro Val Leu Asp Phe 120 Leu	Gln 25 Glu Val Gly Tyr Met 105 Leu	10 Leu Ile Ile Gln Leu 90 Gly Cys	Leu Ser Leu Glu 75 Gly Leu Thr	Ala Val Gly 60 Pro Ala Thr Val Gly	Gly Val 45 Val Thr Lys Ser Pro 125	Gly 30 Pro Gln Leu Glu Ser 110 Glu	15 Leu Asn Gly Thr Ser 95 Phe	His Arg Gly Leu 80 Lys Glu Asp		

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/965,640

DATE: 10/18/2001 TIME: 09:50:58

Input Set : A:\0315-C Seq Listce filed 092701.txt
Output Set: N:\CRF3\10182001\I965640.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application Number